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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,596	04/25/2001	Sunil Shanthaveeraiah	5181-79300	7721
7590	12/06/2004		EXAMINER	
Robert C. Kowert Conley, Rose, & Tayon, P.C. P.O. Box 398 Austin, TX 78767			NANO, SARGON N	
			ART UNIT	PAPER NUMBER
			2157	

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/842,596	SHANHAVEERAIAH ET AL.
	Examiner	Art Unit
	Sargon N Nano	2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 April 2001.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 - 40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 - 40 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/2,8/4, 7/3, 1/3</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____.                                   |

### **DETAILED ACTION**

1. This action is responsive to the application filed on April. 25, 2001. Claims 1 – 40 are pending examination.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5 and 32 recite the limitation "reading" in line 1 of claim 5 and in line 2 of claim 32. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 5, 7 – 10, 12 – 20, 22 – 25, 28 – 32, 34 – 37, 39, 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al et al. U.S. Patent No. 6,633,538 (referred to hereafter as Tanaka).

As to claim 1, Tanaka teaches a method for bringing fabric devices online to be accessible from a host system coupled to a fabric, wherein a plurality of fabric devices are coupled to the fabric, the method comprising:

storing in a persistent repository an indication of which of the fabric devices are online for the host system to be accessible from the host system (see col. 8 lines 12 – 67 , Tanaka discloses network nodes are stored on data server) ;

following a reboot of the host system, reading the persistent repository to determine which fabric devices were online prior to the reboot ( see col. 5 lines 12 – 20, Tanaka discloses Tanaka discloses the taking over and the performance of both functions provided by the slave node that was stopped due to the failure and the monitoring of a node to be monitored by the slave node) ; and

requesting the fabric devices that were online prior to the reboot to be brought online for the host system( col. 5 lines 20 – 27 and col. 10 line s 24 – 50, Tanaka discloses adding or restoring a failed node).

As to claim 2, Tanaka teaches the method as recited in claim 1, further comprising:

receiving a notification that a fabric device is no longer available ( see col. 17 lines 5 – 12 Tanaka discloses master node receive information from control node); and in response to said receiving, updating the persistent repository to reflect that the unavailable fabric device is offline ( see col. 17 lines 5 – 15 Tanaka disclose the updating of master identification information).

As to claim 3, Tanaka teaches the method as recited in claim 2, wherein said receiving a notification comprises receiving an event from a fabric driver executing on the host system (see col. 6 lines 14 – 23, Tanaka discloses notification of the slave node to monitor a specific node).

As to claim 4, Tanaka teaches the method as recited in claim 1, wherein the host system comprises one or more I/O ports, the method further comprising:

performing a discovery process in response to said reboot, the discovery process comprising:

determining whether each of the I/O ports is coupled to one or more direct attach devices or to the fabric ( see col. 5 lines 4 – 11, Tanaka discloses the discovering of devices using a address management table);

for each of the I/O ports coupled to one or more direct attach devices, discovering the direct attach devices and bringing online each direct attach device for the host system (see col. 15 line 1 – 22, Tanaka discloses the duplication of arbitrary number of slave nodes) ; and

for each of the I/O ports coupled to the fabric, designating the I/O port as a fabric port without attempting to discover the fabric devices. (see col. 15 lines 1 – 22, Tanaka

discloses the duplication of arbitrary number of slave nodes.

As to claim 5, Tanaka teaches the method as recited in claim 4, wherein said reading the persistent repository and said requesting the fabric devices are performed for one or more of the I/O ports designated as a fabric port (see col. 7 lines, lines 50 – 65 and fig. 3 Tanaka discloses network nodes and their connections).

As to claim 7, Tanaka teaches the method as recited in claim 4, wherein each of the I/O ports coupled to one or more direct attach devices comprises a port to a Fibre Channel private loop or point-to-point link (see fig. 3 , Tanaka discloses a point to point link).

As to claim 8, Tanaka teaches the method as recited in claim 4, wherein said determining whether each of the I/O ports is coupled to one or more direct attach devices or to the fabric comprises:

attempting to log-in to the fabric through each I/O port ( see col. 13 , lines 61 – col. 14 line 2);

if the log-in fails, designating the I/O port as a direct-attach port; ( see col. 2 lines 24 – 33 Tanaka discloses the failure in node and events are monitored by another node). and

if the log-in is successful, designating the I/O port as a fabric port ( see col. 13 lines 61 – 67 , Tanaka discloses the resource is duplicated and checks if the virtual IP address is ineffective).

As to claim 9, Tanaka teaches the method as recited in claim 1, wherein said requesting the fabric devices that were online prior to the reboot to be brought online

comprises requesting a fabric driver to create device nodes within the host system for each device that was online prior to the reboot, wherein each device node provides a mechanism for accessing a corresponding one of the fabric devices through an operating system executing on the host system (see col. 5, lines 11 – 28, Tanaka discloses the monitoring of other nodes in the network).

As to claim 10, Tanaka teaches the method as recited in claim 1, wherein said storing in a persistent repository comprises:

receiving from a fabric driver an indication of which ones of the fabric devices were successfully brought online (see col. 8 line 85 – col. 9, line 15, Tanaka discloses confirmation packet transmitted to virtual IP address); and

in response to said receiving, updating the persistent repository to indicate the ones of the fabric devices that were successfully brought online( see col. 17 lines 5 – 15 Tanaka disclose the updating of master identification information).

As to claim 12. Tanaka teaches the method as recited in claim 1, further comprising, prior to said reboot:

requesting a fabric driver to provide a list of the fabric devices coupled to the fabric, wherein said fabric driver provides an interface for the host system to said fabric ( see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources);

receiving the list of fabric devices from said fabric driver ( see col. 5 lines 50 – 59, Tanaka discloses monitoring address list);

requesting the fabric driver to online a selected subset of the fabric devices from the list so that the selected subset of fabric devices are accessible from the host system; and wherein said storing comprises updating or creating the persistent repository to indicate which of the fabric devices are online ( see col. 17 lines 5 – 16 , Tanaka discloses master node receive information and update of master identification information) .

As to claim 13, Tanaka teaches the method as recited in claim 12, wherein said selected subset of the fabric devices is selected by:

an application displaying the list to a user ( see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources) ; and the user selecting one of the listed fabric devices ( see col. 7 lines 1 – 7 , Tanaka discloses that according to the user's instruction the resources are processed).

As to claim 14, Tanaka teaches a host system, comprising:

one or more adapter ports for coupling to a fabric, wherein a plurality of fabric devices attached to the fabric are visible to the host system through one of said adapter ports( see col. 5 lines 4 – 11, Tanaka discloses the discovering of devices using a address management table);

a fabric driver configured to interface the host system to the fabric ( see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources);

an application configured to request the fabric driver to bring online a selected subset of the fabric devices for access from the host system; ((see col. 15 line 1 – 22, Tanaka discloses the duplication of arbitrary number of slave nodes)

wherein the fabric driver is further configured to attempt to online the selected subset of fabric devices and indicate to the application which ones of the selected subset are successfully onlined (see col. 8 line 85 – col. 9, line 15, Tanaka discloses confirmation packet transmitted to virtual IP address) ; and

wherein the application is further configured to store in a persistent repository an indication of the fabric devices that are successfully onlined ( see col. 8 lines 12 – 26 67 , Tanaka discloses network nodes are stored on data server) ;

As to claim 15, Tanaka teaches the host system as recited in claim 14, wherein the application is further configured to:

read the persistent repository following a reboot of the host system to determine which fabric devices were online prior to the reboot ( see col. 5 lines 12 – 20, Tanaka discloses Tanaka discloses the taking over and the performance of both functions provided by the slave node that was stopped due to the failure and the monitoring of a node to be monitored by the slave node); and

request the fabric driver to bring online the fabric devices that were online prior to the reboot ( col. 5 lines 20 – 27 and col. 10 line s 24 – 50, Tanaka discloses adding or restoring a failed node).

As to claim 16, Tanaka teaches the host system as recited in claim 14, wherein:

the application is further configured to request the fabric driver to provide a list of the fabric devices attached to the fabric that are visible to the host system through one of said adapter ports( see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources); ; and

the fabric driver is further configured to provide the list of fabric devices to the application in response to the request for the list from the application ( see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources);

As to claim 17, Tanaka teaches the host system as recited in claim 16, wherein the application is further configured to:

display the list to a user through a graphical user interface( see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources); and

provide through the user interface for the system administrator to select devices from the list as the selected subset of the fabric device to be brought online ( see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources).

As to claim 18, Tanaka teaches the host system as recited in claim 14, wherein

said fabric driver is further configured to create device nodes within the host system for each device of the selected subset, wherein each device node provides a mechanism for accessing a corresponding one of the subset of fabric devices through an operating system executing on the host system (see col. 5, lines 11 – 28, Tanaka discloses the monitoring of other nodes in the network).

As to claim 19, Tanaka teaches the host system as recited in claim 14, further comprising a plurality of I/O ports including the one or more adapter ports for connecting to a fabric, wherein the host system is further configured to execute a discovery process comprising:

determining whether each of the I/O ports is coupled to one or more direct attach devices or to the fabric( see col. 5 lines 4 – 11, Tanaka discloses the discovering of devices using a address management table);

for each of the I/O ports coupled to one or more direct attach devices, discovering the one or more direct attach devices and creating an operating system node for accessing each direct attach device; and

for each of the I/O ports connected to the fabric, designating the I/O port as a fabric port without attempting to discover the fabric devices.

As to claim 20, Tanaka teaches the host system as recited in claim 19, wherein said discovery process is configured to execute in response to a reboot of the host system, and wherein said application is configured to execute on the host system subsequent to said reboot and said discovery process to:

read the persistent repository to determine which fabric devices were online prior to the reboot ( see col. 5 lines 12 – 20, Tanaka discloses the taking over and the performance of both functions provided by the slave node that was stopped due to the failure and the monitoring of a node to be monitored by the slave node); and

request the fabric driver to bring online the fabric devices that were online prior to the reboot ( col. 5 lines 20 – 27 and col. 10 line s 24 – 50, Tanaka discloses adding or restoring a failed node).

As to claim 22, Tanaka teaches the host system as recited in claim 19, wherein each of the I/O ports coupled to one or more direct attach devices comprises a port to a Fibre Channel private loop or point-to-point link (see fig. 3, Tanaka discloses a point to point link).

As to claim 23, Tanaka teaches the host system as recited in claim 19, wherein said determining whether each of the I/O ports is connected to direct attach devices or to the fabric comprises:

attempting to log-in to the fabric through each I/O port( see col. 13 , lines 61 – col. 14 line 2);

if the log-in fails, designating the I/O port as a direct-attach port ( see col. 2 lines 24 – 33 Tanaka discloses the failure in node and events are monitored by another node); and

if the log-in is successful, designating the I/O port as a fabric port ( see col. 13 lines 61 – 67 , Tanaka discloses the resource is duplicated and checks if the virtual IP address is

ineffective).

As to claim 24, Tanaka teaches the host system as recited in claim 14, wherein the application comprises a library configured to provide an interface to said fabric driver, wherein requests to bring fabric devices online are interfaced to the fabric diver through said library (see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources);

As to claim 25, Tanaka teaches the host system as recited in claim 24, wherein the library is further configured to:

receive from the fabric driver a notification that a fabric device is no longer available( see col. 17 lines 5 – 12 Tanaka discloses master node receive information from control node; and

update the persistent repository to reflect that the unavailable fabric device is offline ( see col. 17 lines 5 – 15 Tanaka disclose the updating of master identification information).

As to claim 28, Tanaka teaches A computer readable medium having stored thereon data representing sequences of instructions, wherein the sequence of instructions are executable by one or more processors to implement:

storing in a persistent repository an indication of which of the fabric devices are online for the host system to be accessible from the host system ( see col. 8 lines 12 – 67 , Tanaka discloses network nodes are stored on data server) ;

following a reboot of the host system, reading the persistent repository to determine which fabric devices were online prior to the reboot( see col. 5 lines 12 – 20, Tanaka discloses Tanaka discloses the taking over and the performance of both functions provided by the slave node that was stopped due to the failure and the monitoring of a node to be monitored by the slave node); and

requesting the fabric devices that were online prior to the reboot to be brought online for the host system ( col. 5 lines 20 – 27 and col. 10 line s 24 – 50, Tanaka discloses adding or restoring a failed node).

As to claim 29, Tanaka teaches the computer readable medium as recited in claim 28, wherein the sequence of instructions are further executable by one or more processors to implement:

receiving a notification that a fabric device is no longer available( see col. 17 lines 5 – 12 Tanaka discloses master node receive information from control node); and in response to said receiving, updating the persistent repository to reflect that the unavailable fabric device is offline( see col. 17 lines 5 – 15 Tanaka disclose the updating of master identification information).

As to claim 30, Tanaka teaches the computer readable medium as recited in claim 29, wherein said receiving a notification comprises receiving an event from a fabric driver executing on the host system (see col. 6 lines 14 – 23, Tanaka discloses notification of the slave node to monitor a specific node).

As to claim 31, Tanaka teaches the computer readable medium as recited in claim 28, wherein the host system comprises one or more I/O ports, wherein the

sequence of instructions are further executable by one or more processors to implement:

performing a discovery process in response to said reboot, the discovery process comprising:

determining whether each of the I/O ports is coupled to one or more direct attach devices or to the fabric;

for each of the I/O ports coupled to one or more direct attach devices ( see col. 5 lines 4 – 11, Tanaka discloses the discovering of devices using a address management table);

discovering the direct attach devices and bringing online each direct attach device for the host system (see col. 15 line 1 – 22, Tanaka discloses the duplication of arbitrary number of slave nodes); and

for each of the I/O ports coupled to the fabric, designating the I/O port as a fabric port without attempting to discover the fabric devices (see col. 15 line 1 – 22, Tanaka discloses the duplication of arbitrary number of slave nodes).

As to claim 32, Tanaka teaches the computer readable medium as recited in claim 31, wherein said reading the persistent repository and said requesting the fabric devices are performed for one or more of the I/O ports designated as a fabric port (see col. 7 lines, lines 50 – 65 and fig. 3 Tanaka discloses network nodes and their connections).

As to claim 34, Tanaka teaches the computer readable medium as recited in claim 31, wherein each of the I/O ports coupled to one or more direct attach devices comprises a port to a Fibre Channel private loop or point-to-point link (see fig. 3 ,

Tanaka discloses a point to point link).

As to claim 35, Tanaka teaches the computer readable medium as recited in claim 31, wherein said determining whether each of the I/O ports is coupled to one or more direct attach devices or to the fabric comprises: attempting to log-in to the fabric through each I/O port( see col. 13 , lines 61 – col. 14 line 2);

if the log-in fails, designating the I/O port as a direct-attach port( see col. 2 lines 24 – 33 Tanaka discloses the failure in node and events are monitored by another node; and

if the log-in is successful, designating the I/O port as a fabric port ( see col. 13 lines 61 – 67 , Tanaka discloses the resource is duplicated and checks if the virtual IP address is ineffective) .

As to claim 36, Tanaka teaches the computer readable medium as recited in claim 28, wherein said requesting the fabric devices that were online prior to the reboot to be brought online comprises requesting a fabric driver to create device nodes within the host system for each device that was online prior to the reboot, wherein each device node provides a mechanism for accessing a corresponding one of the fabric devices through an operating system executing on the host system (see col. 5, lines 11 – 28, Tanaka discloses the monitoring of other nodes in the network).

As to claim 37 Tanaka teaches the computer readable medium as recited in claim 28, wherein said storing in a persistent repository comprises:

receiving from a fabric driver an indication of which ones of the fabric devices were successfully brought online (see col. 8 line 85 – col. 9, line 15, Tanaka discloses confirmation packet transmitted to virtual IP address); and

in response to said receiving, updating the persistent repository to indicate the ones of the fabric devices that were successfully brought online ( see col. 17 lines 5 – 15 Tanaka disclose the updating of master identification information).

As to claim 39, Tanaka teaches the computer readable medium as recited in claim 28, wherein the sequence of instructions are further executable by one or more processors to implement, prior to said reboot:

requesting a fabric driver to provide a list of the fabric devices coupled to the fabric, wherein said fabric driver provides an interface for the host system to said fabric ( see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources);

receiving the list of fabric devices from said fabric driver( see col. 5 lines 50 – 59, Tanaka discloses monitoring address list;

requesting the fabric driver to online a selected subset of the fabric devices from the list so that the selected subset of fabric devices are accessible from the host system( see col. 17 lines 5 – 16 , Tanaka discloses master node receive information and update of master identification information) . ; and

wherein said storing comprises updating or creating the persistent repository to indicate which of the fabric devices are online ( see col. 8 lines 12 – 67 , Tanaka

discloses network nodes are stored on data server).

As to claim 40, Tanaka teaches the computer readable medium as recited in claim 39, wherein said selected subset of the fabric devices is selected by:

an application displaying the list to a user ( see col.7, line 61 – col. 7 line 2 Tanaka displays an interface for displaying a resource duplication designation screen and enabling a user to instruct the master node to execute resources); and

the user selecting one of the listed fabric devices ( see col. 7 lines 1 – 7 , Tanaka discloses that according to the user's instruction the resources are processed).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6, 11, 21, 26, 27, 33, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Allen et al. U.S. Patent No. 6,792,479.(referred to hereafter as Allen).

As to claims 6, 11, 21, 26, 27, 33 and 38, Tanaka teaches the claimed invention as described above. Tanaka does not explicitly teach the Fibre Channel Network.

However, Allen teaches a system and method for using Fibre Channel for tracking of SCSI identifiers in known configurations. ( see col. 7, line 58 – col. 8 , line 19). It would have been obvious to one of ordinary skill in the art at the time of the

invention was made to include Allen's Fibre Channel Fabric into the invention of Tanaka in order to increase the rate of data transfer within the network.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Blonstein et al. U.S. Patent No. 6,016,144.(referred to hereafter as Blonstein).

As to claim 17 , Tanaka does not explicitly teach the graphical user interface . however Blonstein teaches graphical user interface , (see col. 6 lines 34 – 47, Blonstein discloses displaying graphic data representing a graphical user interface. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include graphical user interface in Allen's invention to make it user friendly.

6. The prior art made of record and not relied upon considered pertinent to applicant's disclosure.

- ATM / Sonet Network Enhanced As A Universal computer System Interconnect. By Boggs et al. U.S. Patent No. 5,959,994.
- Method And Apparatus For determining An Identity Of A Network Device By Blumenau et al. U.S. Patent No. 6,665,714.
- Method And System For Discarding Locally Committed Transactions To Ensure Consistency In a server Cluster By Shrivastava et al. U.S. Patent No 6,449,734.
- Method And Apparatus For Independent And Simultaneous Access To A Common Data Set By Ofek U.S. Patent No. 6,654,752.

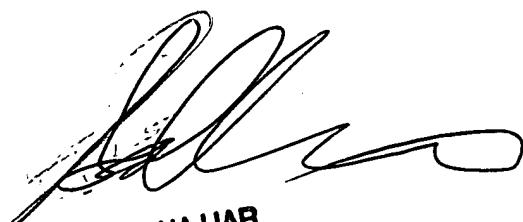
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano  
Patent Examiner  
Art Unit 2157  
Nov. 23, 2004



SALEH NAJJAR  
PRIMARY EXAMINER